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CHEMONICS

PROEXAG

NON-TRADITIONAL AGRICULTURAL EXPORT SUPPORT PROJECT

DATA COMMUNICATON TECHNICAL ADVISORY

Assignment Number: ST/88-02F

SUBMITTED TO:

Regional Office for Central America and Panama (ROCAP)
U.S. Agency for International Development
Guatemala City, Guatemala

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PREFACE AND EXECUTIVE SUMMARY

Under the original project plan, ST/INFO/88-02F/ON-LINE PHASE VI, a daughter network for the Central American region was conceived as a possible solution to the expected problems of increasing costs for data as the users needs grow and problems relating to the reliability of the methods of access. This report addresses the problems of data cost and reliable access and provides cost effective solutions and a path for implementation.

The original solution to implement a daughter system containing a subset of information from the AgriData Network (ADN) for access by the users in the region is no longer a viable alternative. The dramatic progress made by the X.25 packet switching vendor in the region in conjunction with the installation of X.25 access nodes in each of the countries by the local Public Telephone, and Telegraph (PTT) vendors has eliminated the viability of a daughter system network.

During the course of this trip, analysis and design were completed to further reduce the costs associated with data transmission and improve the reliability of the system in addition to providing the necessary documentation for the proper understanding and support of the system from the AgriData Network headquarters in the US. This work is attached in the AgriData Resources Inc. (ARI) System Development Methodology (SDM) format for analysis, design, construction and installation phases.

The analysis phase assesses the business requirements of the users and develops a logical model for a system providing solutions to those requirements. This logical model is represented with data flow diagrams and a data dictionary of terms.

The design phase outlines the physical implementation of the logical model in the form of a network diagram, structure charts and process specifications.

The construction phase supplies the source code necessary to implement the physical design in a working system.

Finally, the installation phase provides the means for putting the system into productive use.

These phases are attached to the trip report as Appendix A.

The design phase outlines a plan for standardization of the communication software so that the repetitive processes of dialing, and signing on through the various network vendors is automated to the extent that each user's local conditions can support. After the sign on process is complete, each users can access the information required using one of two methods. This complements the type information requested.

In addition, tests were performed to analyze the level of errors in data transmission and recommendations made to reduce or eliminate these errors or the conditions causing the errors. Also, the issue of system reliability was analyzed and recommendations presented on this topic.

Special electronic components were delivered to the region so that Bruce Brower can perform these tests at any time in the future and provide solution where needed.

The installation phase provides a plan for implementation of a standard communications tool that serves the needs of all users through a standard program that can be customized at each user's site to accommodate local conditions.

Specific suggestions for optimal operation with respect to minimizing costs and maximizing reliability are made in the sections of the trip report for each country.

I. Guatemala

A. Introduction

Our first observations in the region were made at the PROEXAG offices. We were not able to make observations at the Gremial offices due to problems with their phone service. Specifically, the line was accidentally cut and service is not expected to be restored.

B. Major Topics

1. Analysis

Difficulties here arose from two sources. One source of difficulty was the initial phone connection. The local phone system requires a pause of several seconds before a dial is available. The second source of difficulty was the connection between the X.25 network and the IBM Information Network (IBM IN.) Also, some infrequent instances of data corruption due to phone line noise was observed.

Additionally, tests were performed with respect to sending of pre-formatted text files to the electronic mail system. The problems observed here are due largely the configuration of the communication software initially in use at this site.

2. Recommendations

The users at this site have programmed a pause in the dialing commands to accommodate the delay in the reception of the dial tone. This would have been our recommendation.

The difficulties observed with the connection between the X.25 network and IBM IN have been reported to the network vendor. A problem report will be opened and the problem will be investigated by AgriData Resources, Inc. (ARI) and IBM IN personnel.

Test equipment has been provided to Bruce Brower for testing solutions to the phone line noise problems observed. This equipment can be used at any site he visits. If the equipment proves to be useful, additional equipment can be assembled from parts in the region or ordered from AgriData Network. At the PROEXAG site in Guatemala City, the frequency of line noise did not seem to be significant.

It was recommended that the user at this site configure his on-line network profile for default access to AgriScan in order to eliminate the need for a command and the subsequent time required to process the command. Also, we recommend that this user enter the security code and password at the security code prompt. Again, this will reduce the connect time by eliminating a prompt response turn around process.

It should be noted that at this site there is competition for the phone available lines with the FAX equipment installed there. This contributes to the reliability of the connection but is under control of the user. At their discretion, additional phone lines could be installed to eliminate the competition.

C. Conclusions

Please see the region wide recommendations in the final conclusion section as well as the ARI SDM attachment for standardization of processes and communication software.

II. Honduras

A. Introduction

Observations were made at the offices of FEPROEXHA with respect to data file transfer quality, system reliability and cost containment. The users here had installed a highly reliable automated system for network access. It is this system that forms the basis for the common communications tool recommended in the ARI SDM attachment.

B. Major Topics

1. Analysis

The main problems at this site are due to local interference. The phone line used for data communications is shared with the voice telephone installed in the office. At times, the communication process is interrupted by interference from the voice lines. Also, some degree of data error due to phone line noise were observed. Additionally, the problem connecting the X.25 network to IBM IN was observed.

Overall, this site was making good used of a simple yet effective automated dial and connection command file built for their communication software. The user selects a command file and the communication software executes the dialing process and network sign on processes.

2. Recommendations

The difficulties observed with the connection between the X.25 network and IBM IN have been reported to the network vendor. A problem report will be opened and the problem will be investigated by AgriData Resources, Inc. (ARI) and IBM IN personnel.

It was recommended that the user at this site configure his on-line network profile for default access to AgriScan in order to eliminate the need for a command and the subsequent time required to process the command. Also, we recommend that this user enter the security code and password at the security code prompt. Again, this will reduce the connect time by eliminating a prompt response turn around process.

Additionally, the user should secure the phone line leading to the PC work station to the wall if possible. It was observed that some phone line noise seemed to correlated to physical movement of the phone line. It is in close proximity to the user who can inadvertently move the line and cause data errors.

Also, the test equipment provided to Bruce Brower could be installed and further observations made but the rate of errors observed in the initial visit was not significant.

Also, observed at this site was a message from the X.25 network concerning the re-setting of the pad. This may have signalled if not caused some data loss. the problem has been reported to the network vendors and problem determination is underway.

C. Conclusions

Please see the region wide recommendations in the final conclusion section as well as the ARI SDM attachment for standardization of processes and communication software.

III. Costa Rica

A. Introduction

Observations were made at the CAMARA NACIONAL DE AGRICULTURA Y AGROINDUSTRIA offices with respect to data transfer quality, system reliability and cost containment.

B. Major Topics

1. Analysis

A significant line noise problem was observed here and the electronic equipment installed to test reduction. A 47 ohm device proved to be most efficient in noise reduction and was provided to the user.

A problem in the user's notes regarding the international Telenet address was corrected. Also, a macro was built for the user's communication software (Hayes Smartcom II) to facilitate network sign-on procedures.

Additionally, the problem connecting the X.25 network to IBM IN was observed.

2. Recommendations

The installation of the standard communication software with the complete log-on facility will help this user. Due to the limited ability of the Smartcom II to distinguish the network prompts properly and the timing delays of international access, this user's sign-on process is not fully automated. The region wide standard communication system has the capacity to correctly deal with all of the network prompts as well as the varying time delays of the international connection.

The difficulties observed with the connection between the X.25 network and IBM IN have been reported to the network vendor. A problem report will be opened and the problem will be investigated by AgriData Resources, Inc. (ARI) and IBM IN personnel.

It was recommended that the user at this site configure his on-line network profile for default access to AgriScan in order to eliminate the need for a command and the subsequent time required to process the command. Also, we recommend that this user enter the security code and password at the security code prompt. Again, this will reduce the connect time by eliminating a prompt response turn around process.

C. Conclusions

Please see the region wide recommendations in the final conclusion section as well as the ARI SDM attachment for standardization of processes and communication software.

IV. Conclusions

With the installation of the X.25 PTT node, communication quality and reliability has dramatically increased. When problems with line quality occur, we suggest testing with the equipment provided and installing the noise reduction equipment as needed. This is most effective and least cost improvements that can be made to the quality of the data transfer.

A daughter system network is no longer thought to be a cost effective solution to the requirements of the users in the region. These users retrieve a relatively small but diverse quantity of information. The cost of even a one time transmission of the subset of information to satisfy their requirements would be considerably more than just accessing the information directly. One primary factor here is that the number of users is low and there is no realistic expectations of any dramatic growth.

Earlier in the project, the use of high speed error checking modems was suggested. Although ADN employs 2400 baud MNP error checking modems, this would not be an effective solution for the users in the region primarily because the use of these modems would require a direct overseas call to ADN. The cost of overseas phone calls far out weigh any benefits that might be made up in connect time and lower rates of error.

Note here that the installation of local X.25 access in each country has changed the outlook on the use of this equipment considerably. With the new X.25 access, the error rates are dramatically lower and the cost of X.25 access is considerably less than overseas direct dialing. When the requirements of the users in area justify it, we can pursue an error checking implementation through the X.25 network. But again due to the low number of current users and relatively lower rates of error this is not worth pursuing at this time.

We recommend the installation of a standardized communication software package to facilitate the dialing and connection process. The software installed at the Honduras site serves as the model for the region wide communications software package. Details are included in the attached ARI SDM construction phase.

As indicated in the ARI SDM analysis phase, the user's have requirements for standard reports as well as ad hoc information requests.

The suggested communication software accesses the network in an automated fashion for speed and accuracy during complicated sigh-on processes then switches to manual mode. The user can then complete the ad hoc requests prior to initiating the on-

line codefile functions for streamlined access to the standard reports

The use of network codefiles for retrieval of the standard reports including the special format reports should provide reliable and cost efficient data transfer options. We have recommended that each user specify /NEW when receiving codefiles to insure that only the reports that have updated since the last time the user received them are downloaded.

Additionally, if the PTT's provide 2400 baud access, we suggest testing at each site with a 2400 baud modem and the noise reduction equipment. From the observations made here and experience at other sites, we assume that the noise reduction equipment will be a requirement for 2400 baud. Even with the equipment, 100 % error free communication may not be possible at this point in time. As the demand for phone service increases along with the ability of the PTT to provide it, the quality of the telephone infrastructure will increase. It may be necessary to wait for these events before implementing 2400 baud error free access.

In order to provide prompt solutions to complex network problems, the network technical staff needs prompt notification and comprehensive descriptions of the problems. When a problem occurs, take careful notes of what error messages appear if any and what exactly was happening when the problem occurs. Also, a screen print is valuable for describing to the technical staff the conditions surrounding the problem. The electronic mail system can be a lower cost alternative to voice phone calls.

With the documentation of the system in the ARI SDM format as well as the first hand observations of ARI personnel, trouble shooting and support from the network headquarters will be easier.

APPENDIX A

Central American Region Wide
PC Communication Software System

AGRIDATA RESOURCES, INC.
SYSTEM DEVELOPMENT METHODOLOGY

ANALYSIS PHASE

The analysis phase depicts the functional components of the system as well as the overall structure that binds them together. It specifies the inputs and outputs, sets the boundaries between manual and automated processes, and determines how these items are partitioned within the system.

After interviewing the user groups to determine needs and requirements and identifying the data elements and how they relate, the logical model of the system is presented with a data flow diagram. There are three elements depicted in these diagrams: data flows (represented by names with arrows), data stores (names between the lines), and processes (names in the bubbles.)

A data dictionary accompanies the data flow diagram to further explain the data elements and their relationships. Also included is a design concept narrative. Process descriptions and the business rules for the manipulation of the data will be detailed in the design phase where necessary.

Design Concept

The users of ADN in this area face several unusual problems. The physical connection to the network is long and cumbersome. Long series of numbers need to be entered (often without the benefit of echoplex so the use can't see what is keyed in) and the possibility for error at any of several stages requires that connection start from the beginning. With few minor differences, the connection techniques are common among users in the region.

When the user gets connected to the network, their requirements are served by two services: AgriScan and StarGram. AgriScan is the ADN library service for keyword searching and retrieval of business information reports. StarGram is the electronic mail system.

The users typically do two things in AgriScan: receive the same set of reports on a scheduled basis and/or search and receive reports on an ad hoc basis. This characteristic is common across all of the users in this region.

The e-mail services are sending mail and receiving mail.

Level 1.0 of the data flow diagrams depict the high level requirements. Users enter requests for services. Users receive information. Users send and receive e-mail.

Level 1.1 explodes the requirements for library services. Users enter either ad hoc requests or standard requests. Users receive report text.

Level 1.2 shows the mail service in more detail. Users supply the StarGram service with descriptions, addresses, and message text (note that this message text can be created with a word processor or text editor and stored prior to sending.) These components comprise a mail message which is routed by the system to one or several users. To receive mail the user must ask for a specific document or set of documents. This data is stored as message text.

Data Dictionary

Library Service Requests =
    Ad Hoc Requests
    or
    Standard Requests

Information =
    1 Report Text
    ...
    n Report Text

E-Mail =
    Sent Mail
    or
    Received Mail

Ad Hoc Requests =
    1 Request
    ...
    n Request

    Un-scheduled needs for information. The users are often asked to find some specific information perhaps through keyword searching or specifying a report code found in the index of reports.

Standard Requests =
    1 Request
    ...
    n Request

    These are the reports that the users retrieve on a scheduled basis. The reports should be stored in codefiles.

Request =
    Command to receive a report or search criteria for a menu of reports.

Reports =
    The business information text from AgriScan library services.

Descriptions =

The 32 character description that is displayed in the mailbox listing.

E-Mail Addresses =

The specification for what user or group of users will receive the message text being sent. Each user is assigned an e-mail address in the format of two letters, three numbers, one letter. E.g.: JS119N.

Message Text =

This is the body of the electronic mail message. It is the narrative portion either sent or received.

Mail Request =

The user needs to tell the system which e-mail document or group of documents he wants to receive. He does this in the form of a mail request. E.g.: VIEW 1, VIEW MAILBOX, or VIEW MAILFILE. It is the network command necessary for mail retrieval.

Design Phase

The design phase delivers these items: the network diagram, the structure charts, the process/module specifications.

Network Diagram

The network diagram shows the physical components of the system from the PC through to the mainframe and is very useful for trouble shooting and understanding whose prompts or error messages the user needs to respond to. Note here the complexity of the connectivity paths. The PC first connects via ASYNCH modems and analog dial-up phone lines to the modems at the local PTT's X.25 access node.

Next, the data is uplinked to satellite, downlinked to a US based relay station, uplinked to a satellite for transmission to RACSA in Costa Rica (for users in Costa Rica the US satellite relay is not used since RACSA is the PTT.)

Then the data is sent through the Telenet X.25 network to IBM IN where it is converted into EBCDIC and an SNA network. ADN is attached to IBM IN via digital T1 carriers.

Structure Charts

See attachment.

Structure charts are used to depict the relationships between the physical processes. Keys to reading the structure charts are:

- o Boxes with double sides indicate processes that terminate at this level.
- o Curved arrows indicate the direction that control flows.
- o The numbers refer to the process/module descriptions.

There is some process that the users execute to start their programs. In some cases it is a batch file. For others, it is a menu program.

At the next level, the users can prepare information for sending to the network. This also indicates the manual process of determining what reports to request or keywords to search for. When they are prepared, they initiate the communication process. After completion of the communication process, the users process the information they receive. Again, this is specific for each user, but includes the steps necessary to print the file or input price data to a data base.

The third level shows the three modules associated with the communication module. They are the connect module, the service module, and the sign off module. The connect module is further expanded below.

There are five terminal processes to the connect module: dial, PTT log-on, Telenet log-on, IBM IN log-on, ADN log-on.

The service module expands into the library service and the e-mail service. Both of these modules explode into two terminal processes: ad-hoc requests and standard request for AgriScan; receive mail and send mail for StarGram.

The sign-off module has two terminal processes: ADN log-off and PTT log-off.

Detailed descriptions follow the module hierarchy outline.

1.0 START UP

2.1 PREPARE INFORMATION

2.2 COMMUNICATION

- .1 CONNECT
  - .1 DIAL
  - .2 PTT LOG-ON
  - .3 TELENET LOG-ON
  - .4 IBM IN LOG-ON
  - .5 ADN LOG-ON
- .2 SERVICE SESSION
  - .1 LIBRARY SERVICE
    - .1 AD-HOC REQUESTS
    - .2 STANDARD REQUESTS
  - .2 STARGRAM SERVICE
    - .1 RECEIVE MAIL
    - .2 SEND MAIL
- .3 SIGN OFF
  - .1 ADN LOG-OFF
  - .2 PTT LOG-OFF

2.3 PROCESS INFORMATION

1.0 START UP

This is the process that each user completes to start the information system. It can be a batch file or a selection from a menu driver program. Each process is unique to each site.

2.1 PREPARE INFORMATION

This includes the work necessary for organizing information and data prior to the on-line network session. It is during this process that the users coordinate through the use of the report code index the report codes or keywords to be used in the forthcoming network session. In addition, this process is where the users prepare text files for transmission through the e-mail system. This is a manual process that varies for each user for each network session.

2.2 COMMUNICATION

This is the high level communication process. We recommend standardizing on the Procomm communication software. It has been set up and tested by the users in Honduras with good results. It includes a sophisticated yet easy to use command file language for automation of the complex log-on procedures yet has a user interface similar to PC Talk.

2.2.1 CONNECT

This process implements and manages the physical connection to the network. The user places a phone call using an autodial modem. Next, commands are sent to sign on to a series of accounts to gain access to ADN via the X.25 network. Four system connections are made.

2.2.1.1 DIAL

This process places the modem in command state and issues a request to dial. A two second delay is recommended to allow the local phone system to supply the dial tone. The local PTT's node to the X.25 network is called. Local conditions in each office may need to be addressed. Many times the phone line used for data is also shared with a fax or voice line. If the manual intervention when conflicts arise becomes burdensome, a dedicated data line should be installed.

2.2.1.1.2 PTT LOG-ON

In each country, the local PTT supplies connection details as well as account codes and passwords. The process seems to be standard across the region and the command files work well with the prompts issued by the PTT nodes. This is an important improvement to

automate this access. If the process is carried out manually, the local node often operates with no echoplex. The user cannot see what he is typing and errors are frequently made at this step.

2.2.1.1.3 TELENET LOG-ON

Here is where the user specifies the international Telenet address for IBM IN. Note here that it was observed that Honduras required the abbreviated form of the address while the other countries allowed the full international address.

2.2.1.1.4 IBM IN LOG-ON

Here the user must specify the generic address for ADN on IBM IN. In the region, it is "* ARI1" followed by a carriage return. At this time a line mode session is established with ADN via IBM IN. We observed many instances where the session was not established properly and a re-dial was required. This problem has been reported to the network technical staff and problem determination is underway.

Note that after the "* ARI1" is sent there is a delay of 60 to 90 seconds before the ADN security prompts appear. This is a normal delay require to initialize a session. The autolog command files need to be able to accommodate delays of this length.

2.2.1.1.5 ADN LOG-ON

Each user is required to enter a security code and password to gain access to ADN. We suggest that the command file supply the security and password on the same line. This should speed up the processing turnaround times since the system can check both rather than doing a look up on the security then prompting the user for the password then doing a look up on the password. Security is not an issue at this point since they have already passed several layers of security getting through the X.25 network.

2.2.2 SERVICE SESSION

In this process, a service is selected and the system delivers the information requested. There are two type of line mode services:

- o Library Services for business information selectable by report code and searchable by keywords.

- o StarGram Service for electronic mail.

2.2.2.1 LIBRARY SERVICE

Here the command file has handed operation to the user who is in manual control. The user can request either ad hoc information or the standard information that has been stored in a codefile.

2.2.2.1.1 AD-HOC REQUESTS

Ad hoc requests accommodate keyword searching where the user is looking for some specific information usually on a one time only basis. The keyword search supplies the user a list of report codes and headlines. the user can narrow the search or request a specific report or several reports.

2.2.2.1.2 STANDARD REQUESTS

Standard requests are reports that the user has defined in codefiles and are usually accessed on a scheduled basis. Here the user should specify the "/NEW" command when retrieving codefiles. The system will deliver only those reports that have updated since the last time the user accessed this codefile.

Here is where significant savings can be made in data transmission costs. ARI has installed special software to re-format the USDA daily price reports by commodity for specified markets. For the users in the region, they can get information on the commodities and markets of their choice without the need to retrieve large reports and throw away most of the information. We recommend they use these reports and specify the format for new reports of this nature. If they can standardize and define their scheduled needs, we can make adjustments necessary to add commodities and markets and develop special reports.

Additional savings can be obtained by always saving the data to a disk file as it is received. All printing should be done off-line. Users should avoid printing while on line since printers generally run slower that the data transmission rates and printer errors can cause the software to pause the transmission while remaining on line incurring connect time charges.

2.2.2.2 STARGRAM SERVICE

Here is where the user has access to the electronic mail facilities. Users can send and/or receive mail while on-line. Messages are sent to and received from others on the network. Each user is identified by an electronic mail address consisting of two letters, three numbers, and one letter. E.g.: JS119N.

2.2.2.2.1 RECEIVE MAIL

This is a manual process where the user requests a display of their mail box with the LIST MAILBOX command. A list of the incoming mail is displayed. The users can ask the system to display messages by number or by group. The two groups are VIEW MAILBOX (all un-read mail) and VIEW MAILFILE (mail that has been read but not filed or tossed.) Also, the user can request the system to display a single document with the VIEW N (where N is as document number like 1, 2, etc.)

2.2.2.2.2 SEND MAIL

This is a manual process where the user issues the command WRITE MAIL and the system prompts for a description. The user enters the description followed by the address or addresses of the recipients. Next, the text of the message is sent. Here the users can use the "/UPLOAD" command to send a text file formatted off line in a text editor or manually key the data while on line. At this time, we do not expect significant usage of this feature because of the limited number of users in the region and the relative complexity of the process.

2.2.3 SIGN OFF

When the user is finished collecting data, they need to sign-off from the network. This process will stop their billing. It is highly recommended to follow this procedure rather than simply dropping the physical connection. A sign off explicitly ends the billing process and displays an audit trail. The user is shown connect time for this session as well as connect time to date in the billing period.

2.2.3.1 ADN LOG-OFF

The ADN log off is accomplished by issuing the "/OFF" command at any prompt and waiting for the display of the connect time information.

2.2.3.2 PTT LOG-OFF

After signing off from ADN the connection should drop back to the local PTT node. In the region, the user sees a "*" as the local prompt. When he sees this prompt, he can drop the physical connection.

2.3 PROCESS INFORMATION

This is where the user puts the information received into their business process. It can be as simple as printing the downloaded file or as complex as entering the data into price history data bases and other analysis tools.

Construction and Installation Phase

Attached here is a sample of the command file used in Honduras for automated dialup acess through the local PTT and sign on to ADN. Notes are shown in ( ) where each installation needs to be customized.

To install the software at each site:

1. Copy the PROCOMM program files to the appropriate subdirectory.
2. Set up the PROCOMM dialing directory with the correct parameters for the network (1200 baud 7 bit word, 1 stop bit, Even Parity.)
3. Initiate a manual communication session and observe the prompt/response dialog necessary for this site's connection.
4. Make changes as necessary to the command file.
5. Test the automatic dial up and sign on sequence.
6. Train the operator at each site to initiate a call and be sure he knows where to find the information that is saved to the log file.
7. Train the operator to receive a file using PgDn and ASCII protocol.

Sample command file from Honduras:

```
;*****************************************************************
;*
;* Programa para logon automatico a AGRIDATA (r)
;*
;*****************************************************************
clear
print off
assign s1 "xxxxxxxx"        ;(Sets up a variable for the file name)
assign s2 "x"
EMULATE ANSI
IF NOT LINKED
   DIAL "1"
ENDIF
message "                              !"
message "Nombre del archivo a grabar!"
get s1 8                ;(Gets the file name from the user.)
log open s1             ;(Opens the log file. This is where data goes)
message "                    !"
message "Imprimir tambien S/N!"
get s2 1
SWITCH S2
   case "S"
      print on
   endcase
   case "s"
      print on
   endcase
   case "n"
      print off
   endcase
   case "N"
      print off
   endcase
ENDSWITCH

TRANSMIT "A"
WAITFOR "Please log in:" 40    ;(Not always seen. If not, WAITFOR "" 5)
TRANSMIT "HO70801076A!"        ;(This is the user's sign on to the PTT)
WAITFOR "password:" 40         ;(Sometimes not shown.)
TRANSMIT "CA5961M!"
WAITFOR "telenet" 40           ;(Sometimes not seen because Telenet
TRANSMIT "C 813147!"           ;(address is included in log in.)
WAITFOR "===>" 40              ;(IBM IN prompt.)
TRANSMIT "* ARI1!"
WAITFOR "Enter Security Code." 90
TRANSMIT "CG03119 HONDUR!"     ;(Change this for each user)
WAITFOR "1=>" 90
TRANSMIT "/RUN!"               ;(Also optional, each user may not want
WAITFOR "1=>" 40               ;(/RUN on right away)
TRANSMIT "V R !"
ALARM
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